

Statement of
Jim Peach
Regents Professor of Economics
New Mexico State University
Las Cruces, NM
Before the Revenue Stabilization and Tax Policy Committee
October 13, 2016

Mr. Chairman and Members of the Committee: Thank you for this opportunity to discuss the New Mexico economic base studies and their implications for the New Mexico economy. The analysis and perspectives in this brief statement are my own. Nothing that I say should be interpreted as NMSU policy or opinion.

The New Mexico economy has been under-performing relative to our neighboring states and the nation for many years. New Mexico's economic problems are long-term and structural. These long term issues have little to do with the downturn in oil and gas prices and they will not be solved by a return to higher energy prices –no matter how much higher prices might be welcomed in the state.

Between December 2007, when the national recession officially started, and August 2016, New Mexico ranked 49th among the 50 states in the percent change in non-farm employment. Only Wyoming fared worse. Between June 2009, when the recovery from the national recession began, and August 2016, New Mexico ranked 48th among the 50 states in the percent change in non-farm employment. Only Wyoming and West Virginia performed worse. From August 2015 to August 2016, New Mexico ranked 44th among the 50 states when ranked by the same measure¹.

As of August 2016, New Mexico has 21,600 fewer jobs than it had in December 2007. It now appears unlikely that the state will have as many jobs in December 2017 as it did a decade earlier. Since December 2007, New Mexico's manufacturing employment decreased by 9,900 jobs and construction employment decreased by 16,600 jobs. The mining sector, which includes the oil and gas industry, now has 1,600 fewer jobs than it did in December 2007.

Some perspective on the employment data is needed. If New Mexico non-farm employment growth had averaged 1% per year since December 2007, then by 2016 the state would have had 928.6 thousand jobs –100.6 thousand jobs more than the August 2016 figure of 828 thousand. If the average growth

¹ The employment data in this paragraph and the next are seasonally adjusted at annual rates from the U.S. Bureau of Labor Statistics, Current Employment Statistics (CES) program, State and Area Employment, Hours and Earnings (SAE) data base. <http://www.bls.gov/sae/>

rate had been 1.5 percent, we would have 970.9 thousand jobs in 2016 –142.9 thousand jobs more than the August 2016 figure.

Are these growth rates plausible? Of course. The average annual growth rates of New Mexico employment in the 1970s was 4.8%, in the 1980s 2.1%, and in the 1990s 2.6%. From 2000 to 2007, the average annual employment growth rate was 1.7%, a rate higher than the most optimistic scenario described above (1.5%). In all of these time periods the New Mexico average employment growth rate was higher than the US growth rate. For the U.S. the employment growth rates were: 1970s 2.5%, 1980s 1.9%, 1990s 1.8%, 2000 to 2007 0.6%. From 2010 to 2015, the national growth rate averaged 1.7%.

What should be obvious from the two very possible scenarios above is that the state would not be facing a fiscal crisis for FY16 or FY17. There would have been no special session and no one would be expecting that additional cuts to the state budget would be necessary for FY18. Rough calculations indicate that the additional employment of a 1% employment growth rate since 2007 could have increased GRT revenues by about \$400 million and PIT revenues by about \$160 million in FY16 alone. In addition, expenditures in a number of categories would probably have been lower². Even if the increased revenue were only half as large as these simple calculations (\$280 million), FY16 could have been handled without much difficulty. Similar calculations could be made for FY17 and beyond.

Other economic indicators for the state also suggest a troubled economy. New Mexico's unemployment rate as of August 2016 was 6.6 percent, a figure that is considerably higher than the national rate of 4.9%. New Mexico's August unemployment rate was higher than that of any of our neighboring states (AZ 5.8%, CO, 3.8%, OK 5.1%, TX, 4.7%, and UT 3.7%)³.

New Mexico's Real Gross Domestic Product (RGDP) decreased by 0.05 percent from 2015 Q1 to 2016 Q1. Again, New Mexico did not compare favorably with either the nation (1.2% increase) or with its neighboring states (AZ +1.8%, CO +2.5%, OK -3.0%, TX +0.2%, and UT +3.3%)⁴.

² The calculations are simple. In FY15, GRT revenue was \$2,095 million. With a 1% employment growth rate NM employment would have been about 12% higher in 2016 than it actually was. Applying this 12% to FY 15 GRT revenue yields approximately \$2,350 million or about \$400 million more than the reported figure of \$1,957 million. The FY 15 and FY16 values are as reported by the Consensus Revenue Estimating Group (CREG) in the August Consensus forecast, p. 12. The PIT calculations were similar. Of course, these are very rough approximations.

³ Source: U.S. Bureau of Labor Statistics, News Release, September 20, 2016, Table 3, Civilian Labor Force and Unemployment by State and Selected Area <http://www.bls.gov/news.release/laus.nr0.htm> .

⁴ Bureau of Economic Analysis, Regional Data, Real GDP by State (millions of 2009 dollars), <http://www.bea.gov/regional/index.htm> .

For the first time in five decades, Census Bureau estimates, indicate that New Mexico's population is decreasing⁵. In both 2014 (-1,323 persons) and 2015 (-498 persons), the state lost population. Between 2010 and 2015, 27 of New Mexico's 33 counties exhibited net out-migration and 21 counties lost population. While people migrate for many reasons, the condition of the New Mexico economy almost certainly contributed to population decreases and out-migration.

Given the economic conditions and demographic trends just described, an analysis of the state's industrial structure and the potential for growth of particular industries is important. The legislature has recognized the need for such analysis with the creation of the New Mexico Jobs Council. The Jobs Council has issued a number of reports identifying economic base industries and the number of economic base jobs needed in the state. The Jobs Council should be commended for their work and for generating much needed policy discussion concerning the economic future of the state.

There are a number of ways to identify economic base jobs and still other methods to analyze the structure of regional (sub-national) economies. One frequently used approach is to conduct an economic base study. For a number of years, NMSU's Arrowhead Center has conducted economic base studies for each New Mexico County, the Albuquerque MSA, and the state as a whole. These studies have been updated annually and are posted on the Arrowhead center website: <http://arrowheadcenter.nmsu.edu/economic-and-policy-studies/> Funding for the economic base studies has come from a variety of sources. For the last two years, the base studies have been funded as part of the University Center Grant from the Economic Development Administration (EDA).

An economic base study is a descriptive tool used to analyze the composition of local economic activity. Economic base studies are often conducted to help guide local economic development activities and to help economic development officials make decisions such as what type of firms they should attempt to attract to local areas. Economic base studies can also help local and regional businesses better understand local and export product markets.

The specific purposes of economic base studies include:

- Understand regional economic growth
- Make short and long term forecasts
- Identify potential growth sectors
- Identify potential problem areas

⁵ U.S. Bureau of the Census, Population Estimates Program, Vintage 2015, Components of Change, <http://www.census.gov/popest/estimates.html>

According to economic base theory, any local economy may be divided into basic and non-basic industries. This theory also suggests that economic growth depends on sectors that export goods and services out of the region (basic industries), as opposed to those businesses whose services remain local, (non-basic industries). Basic industries promote local economic growth by bringing jobs and income into the local economy. Non-basic industries serve local residents and provide support to basic industries. An industry classified as basic in one region may be identified as non-basic in another region.

One common means of identifying local basic activity is through the use of location quotients (LQs). LQs are calculated as a single industry's percent of total local employment divided by that industry's percent of total state or national employment. For example, a LQ for a single New Mexico industry (industry j) may be calculated as follows:

$$LQ = \frac{(\text{Employment in industry } j \text{ in NM} / \text{total employment in NM})}{(\text{Employment in industry } j \text{ in US} / \text{total employment in US})}$$

The LQ serves to illustrate the relative importance in the level of the local employment of that sector with respect to the benchmark economy, state or national. A LQ greater than 1.0 indicates that a particular industry employs proportionately more workers locally than it does at the state or national level. Conversely, a LQ of less than 1.0 indicates that the industry of note employs fewer workers locally as compared to the state or national average.

Once basic or base industries have been identified using LQS, It is common in economic base studies to calculate an export-base employment multiplier. This employment multiplier is obtained by dividing total employment by total employment in the basic sectors. In Bernalillo County, for example, the 2014 multiplier is equal to 3.35 (418,815 / 125,092). This ratio suggests that any additional basic sector job in Bernalillo County would be associated with additional 3.35 non-basic sector jobs. The export base multiplier (3.35) calculated above reinforces the importance of basic (exporting) industries to the economy.

In general terms, this employment multiplier is not to be compared to employment multipliers included in economic impact analysis tools including RIMS, REMI, and IMPLAN. Local economic development

policy actions such as the creation of industrial parks, tax abatement and financing, and workforce development projects are often used by local communities to expand an area's economic base.

Our most recent economic base study indicates that the following industries should be considered basic industries in the State of New Mexico for 2014:

1. Mining accounted for 39,435 jobs (LQ = 4.0).
2. Utilities accounted for 4,612 jobs (1.36).
3. Agriculture and related industries, 28,250 Farm employees and 5,641 (LQ = 1.83) Forestry, fishing, and related activities employees, (LQ = 1.03) accounted for 33,891 total jobs
4. Accommodation and Food services (1.12) accounted for 87,918 jobs.
5. Federal government employment, including 17,538 military jobs (LQ = 1.52) and 29,538 federal civilian jobs (LQ = 1.82) , accounted for 47,101 total jobs.
6. State government (LQ=1.44) accounted for 58,152 total jobs.

The implied multiplier for the state was 3.99.

While an economic base study reveals a great deal about the structure of industry in a state or county, there are a number of reasons to be cautious when using the results for policy. First, the export base multipliers are not likely to remain stable from year to year and this problem increases as the size of the economy gets smaller. Second, these studies are usually performed at a high level of aggregation. For example, manufacturing is considered as a single category and this may hide sub-categories of manufacturing that should be considered as basic industries. Third, a LQ is not the only way to identify potential industries as basic or non-basic. Some studies examine sales data from tax reports to define an industry as export or basic if that industry's exports exceed x% of total sales.

Economic base studies are often used to identify clusters of industries to be targeted as part of an economic development plan. New Mexico has identified clusters periodically since the early 1980s and possibly earlier. Sometimes this has been done with focus groups of experts or the general public with or without regard to data analysis. In recent years attempts to identify clusters have been more systematic. Generally, this involves identifying industries with an LQ greater than one and industries in

which employment or sales are growing rapidly. A third requirement sometimes imposed is that the identified industries are matched well with the skills and quantity of labor available in the local area⁶.

The most recent strategic plan of the New Mexico Economic Development Department (NM EDD) mentions a few specific industries (film, transportation hubs, etc.) but it is not a cluster based plan⁷. Rather, the EDD plan calls for various forms of support for businesses of all types and for creating the ‘right business climate.’

No matter what the strategy, economic base studies and many other types of economic analysis can be used to inform policy-makers and to set the context for improving the performance of the New Mexico economy. There is a lot of work that needs to be done.

“New Mexico’s economic problems are not insoluble. But the solutions require a new approach to economic development, a number of policy reforms, and substantial investment in both human capital and physical infrastructure. Without such changes, New Mexico’s economy in 2050 is likely to have fallen further behind national norms for per capita income, employment, and population growth.”⁸

⁶ The Borderplex Alliance has attempted this approach for the El Paso-Ciudad Juarez-Las Cruces regional economy. The Borderplex approach is available at <http://www.borderplexalliance.org/>. The Borderplex target industries include: Defense and Homeland Security, Life Sciences, Clean Technologies, and automotive industries.

⁷ New Mexico Economic Development Department, “Innovation Creates Diversification: New Mexico Economic Development Department Five Year Plan for Strategic Economic Growth and Diversification 2013-2018”, <https://gonm.biz/uploads/documents/publications/nmedd5YearStrategicPlan.pdf>

⁸ Lee Reynis and Jim Peach, *New Mexico 2050*, edited by Fred Harris, UNM Press, 2015, p. 34.